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ABSTRACT

New Jersey has long been a leader in vocational-technical education and support by the State government continues. The Nation's education system fails to prepare young people for careers; it costs us $28 billion a year to "educate" them for potential failure. Career education offers a new approach. Made up of five overlapping levels, fifteen career clusters, and four research models, career education activities are strongly encouraged by the Office of Education. Career education, industrial arts, and vocational education are linked by supporting legislation. Various government-sponsored programs, task forces, and conferences having to do with industrial arts are in progress. Career education is not the same as vocational education; it is for persons of all ages from the first school year through adulthood. (MS)

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CAREER EDUCATION: THE ROLE OF VOCATIONAL EDUCATION AND INDUSTRIAL ARTS*

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*Before the joint meeting of the New Jersey Vocational and Arts Education Association and the New Jersey Industrial Arts Association Meeting at the New Jersey Education Association Convention, Friday, November 3, 1972, Atlantic City.

It is a real honor and privilege for me to have this opportunity on behalf of the U.S. Office of Education to address this distinquished group of New Jersey educators. New Jersey has long been a National leader in vocational and industrial arts education.

The Nation's first system of area vocational-technical schools began in New Jersey with the passage of the County Vocational School Law in 1913. Under the leadership of the late John McCarthy and Dr. Albert E. Jochen, the County vocational school system became a model for the Nation and had great influence upon the area vocational school provisions of the Vocational Education Act of 1963.

New Jersey was one of the first States in the Nation to have a full time State supervisor of industrial arts and has provided much of the National leadership in this field.

As we begin our discussion today of career education and the implementation of this important concept throughout the Nation let me remind you that New Jersey deserves a great deal of credit for its National leadership in career education.

Recently, an article by Dr. Morton Margules of the New Jersey State Department of Education documented several New Jersey "firsts" in career education. Among the most important of these was New Jersey's Technology for Children program (the elementary occupational awareness level of career education) now in its 7th year of development.

Dr. Fred Dreves of the Technology for Children program recently reported that 25% of New Jersey's school districts have installed this program with more than 1,400 teachers and 150 local Technology for Children supervisors involved.

Last year New Jersey was asked to conduct a National conference on Technology for Children for selected State department of education personnel. Nearly every State in the Nation has installed some elements of the Technology for Children program. I learned recently that it is also being tested in other countries including Brazil, Canada, and England.

New Jersey's National leadership in the career development area would not have been possible without the support and leadership of Governor Cahill and the earlier support given to vocational education by Governor Richard J. Hughes.

Governor Cahill spearheaded the Nation's first career development legislation designed to be tested on a school system-wide basis in occupational awareness, occupational orientation, job training and placement, and group guidance and counseling. Governor Cahill insisted upon objective evaluation of the career development pilot project and as a result of positive evidence of success his budget has provided for this year nearly $750,000 to fill in the gaps in the pilot programs and to plan for possible future expansion.

Governor Cahill shared his ideas and concerns on career education and described in detail his career development pilot project to HEW Secretary, Elliott Richardson in the Fall of 1970. Several leaders in business and industry from New Jersey, including Mr. Alexander Summers and James W. Riley accompanied the Governor. I was also present at the meeting along with a very interested observer, Dr. Sidney P. Marland, who at that time was a consultant to the Secretary and had not yet been confirmed as U.S. Commissioner of Education. I think that Governor Cahill had a profound effect on Secretary Richardson and Commissioner Marland because shortly after this meeting Commissioner Marland made his first public pronouncement on the need to change American education through what he called career education. I think the concern of Governor Cahill was shared at that time by many other Governors. As he stated at the New Jersey Invitational Conference on the Governor's Career Development Program:

> "Iam convinced as I have never been before in my life that the single most important answer to the problems in the State of New Jersey lies in the education of our youth ... that when a boy or girl finishes school he or she should be equipped to go on to college or to get gainful employment and become a member of society who can have pride in what he is doing."

Although there are more than 20,000 possible careers in America, diverse enough to encompass everyone's interests and abilities, each year more than 2.5 million of our young people leave our high schools and colleges with no planned career and few, if any, marketable skills. It costs us $28 billion a year to "educate" them for potential failure.

Despite our concerted efforts in recent years to make education more relevant for all the students in our schools, our record is still not very encouraging either in terms of human resources or financial investment. Consider for example that:

- There is increasing separation between students and the world of work. They feel they are not needed by our technological society since fewer and fewer workers are needed to produce more and more consumer goods.
- About one-third of our students pass through high school via what we call the "general curriculum," a type of education which leaves its graduates neither trained with a salable skill nor qualified to pursue higher education.

- There is, in many of our schools, an undesirable counter-productive separation of the vocational education, general education, and and academic curricula, with the result that those in the vocational curriculum are often viewed as low status individuals, while those in the academic curriculum emerge with little contact, preparation toward, or qualification for the world of work.
- Because of the widely held view that a degree is the only kind of socially acceptable occupational preparation in our society, many high school students choose academic preparation. However, many of these students do not go on to college and more begin than complete it. In addition, the numbers who do complete college are increasingly out of proportion to the occupational opportunities in our society. In fact, the Bureau of Labor Statistics of the U.S. Department of Labor predicts that in the foreseeable future, nearly 80% of the jobs to be filled will not require a college degree. This is not to imply that a college education has no value other than that of preparing a student to procure employment. We fully recognize the fact that the educated adult mind is essential to our citizen-guided government concept. However, we do believe that there has been a misguided assumption in our society that you need a college education in order to get a job.
- Our present system often results in hasty career decision making and fails to offer individuals the option of changing directions during their years of preparation or of obtaining new training and shifting occupations later in life.

- Our current system neither provides students with adequate career guidance and counseling while in school nor adequate opportunities for counseling, retraining, and re-entry once they have left the system. Our economy which is based upon technological change, where the rate of change itself is ever increasing, thus freezes out a large number of adults who do not have an adequate level of education.

Other industrially advanced nations faced with similar problems of economic growth have solved them in a variety of ways. In the United States our response is Career Education. We think it is an absolute necessity for a healthy, expanding post-industrial society. Let me explain what we mean by the term.

Career Education is a revolutionary approach to American education based on the idea that all educational experiences, curriculum, instruction, and counseling should be geared to preparing each individual for a life of economic independence, personal fulfillment, and an appreciation for the dignity of work. Its main purpose is to prepare all students for successful and rewarding lives by improving their basis for occupational choice, by facilitating their acquisitions of occupational skills, by enhancing their educational achievements, by making education more meaningful and relevant to their aspirations, and by increasing the real choices they have among the many different occupations and training avenues open to them. While it is anticipated that Career Education would increase the opportunities available to the disadvantaged, it is not explicitly designed to involve

any particular group or segment of society. It is directed at changing the whole educational system to benefit the entire population.

Career Education recognizes the critical decision points when students must be prepared and equipped to decide whether to pursue a job or further education or some combination of both work and formal study. It is a lifelong systematic way of acquainting students with the world of work in their elementary and junior high school years and preparing them in high school and in college to enter into and advance in a career field of their own choosing. For adults it is a way to re-enter formal as well as informal programs of education at any time to upgrade their skills in their established career field or to enter a new career field. It is similar to vocational education, but there is a fundamental distinction. For while vocational education is targeted at producing specific job skills at the high school level and up to but not including the baccalaureate level, Career Education embraces all occupations and professions and can include individuals of all ages whether in or out of school.

Career Education, as we now envision it, has five levels which are not distinct and often are overlapping. Each level has appropriate academic as well as vocational education. The first is the level of career awareness from kindergarten through the sixth grade. The second is occupational information and career exploration ranging from grades seven through nine. The third is specialized job training and placement extending from the tenth through the twelfth year of schooling. The fourth is specific occupational preparation at the post-secondary level. And the fifth and

most important level is adult and continuing education. It is concerned with the continued personal developement and enrichment of the adult citizen as a decision maker at a time when he faces the challenges of family life, community problem solving, expanded leisure time due to the trend toward a shorter work week and increased mechanization, and the estimated 8 to 12 career changes he will have to make during his working lifetime. It is the most important level from a time-line viewpoint since an adult has approximately two-thirds more time to learn than his younger counterpart who has generally completed his formal educational preparation during the first third of his life span.

The U.S. Office of Education has grouped all of the various possible careers into families of "clusters" of occupations as follows: AGRIBUSINESS, BUSINESS AND OFFICE, HEALTH, PUBLIC SERVICE, ENVIRONMENT, COMMUNICATIONS AND MEDIA, HOSPITALITY AND RECREATION, FINE ARTS AND HUMANITIES, MANUFACTURING, MARKETING AND DISTRIBUTION, MARINE SCIENCE, PERSONAL SERVICES, CONSTRUCTION, TRANSPORTATION, AND HOMEMAKING.

We are developing four research models to help schools, colleges, employers, and others visualize and begin to work out their own approaches as they adapt the concept of Career Education to the particular needs of their States, cities, and communities. The first of these is the:

School-based Model. In the early grades Career Education means that the vital academic program is expanded to make children aware of the many fields of endeavor open to them in coming years.

Teachers are trained to relate a science lesson, say, to a career in X-ray technology or oceanography. Curriculum specialists organize course work in social studies to include future job possibilities as an historian, geographer, cartographer, artist, printer. Guidance counselors -- in the elementary as well as secondary schools -- build field trips to factories, shipyards, and salesrooms into career orientation.

In junior high school, Career Education encourages students to explore in some depth two, three, or more broad career clusters. For example, a student's outside interest in an American government course could be keyed to his interest in public service or communications. His field trips might concentrate on visits to his State legislature and to newspapers and radio and TV stations. Students interested in construction could actually take and analyze soil samples and string electric cables.

By senior high school, each student should have made a tentative career selection and begun appropriate training. In the health field, students who want to be paramedics might work part-time in a nearby hospital, along with students who plan to be doctors and pharmacists. All would take the same academic program. Each would leave high school with a skill that has market value immediately or that can be applied to advanced education for a professional degree.

In the 1971-1972 school year, the Office of Education funded pilot projects in six school districts that were already well along in developing the Career Education concept: Mesa, Arizona; Los Angeles, California; Jefferson City, Colorado; Atlanta, Georgia; Pontiac, Michigan; and Hackensack, New Jersey.

In these six projects, the year was devoted largely to planning, teacher training, and curriculum development. About 85,000 students will become fully involved next fall.

In addition, 100 mini-model projects -- at least one in each State -- are serving 700,000 students under small grants authorized by the Vocational Education Amendments of 1968.

The second of these models is the Employer-based Model. This is a total education program for a cross-section of youngsters aged 13 to 18 who find their school offerings unchallenging and want to try a different approach to learning. Operated by a consortium of public and private employers, this model program will use employer know-how and, where appropriate, employer facilities. It will provide both academic and job-related preparation. Students will graduate from the employer-run program with credentials at least equal to those offered by their high school, or they will return to their high school with full credit for work completed. Projects serving about 100 students each will get under way this fall in Portland, Oregon; Charleston, West Virginia; Philadelphia, Pennsylvania; the San Francisco Bay Area; and perhaps one or two other sites.

The third of these models is the Home-Community Model. Designed to enhance the employability of out-of-school adults, this approach will use TV and radio programs to encourage people to utilize career services available in their own communities. Project staff will provide counseling, guidance, and some instructional services. The staff will also assess community effectiveness in providing career training and recommend new services as needed. The Rand Corporation has analyzed four successful TV programs for compatability with a Career Education series keyed to the home-community model. Under a $300,000 contract, the Educational Development Center in Newton, Mass., is studying the potential population of participants, developing an evaluation plan, and drafting concepts in ways in which media and community efforts could most effectively mesh.

The fourth of these models is the Rural-Residential Model. Designed for disadvantaged families living in remote rural areas with few career opportunities. This model provides the opportunity to move temporarily to a training center where every member of the family can learn new skills for employment, homemaking, or further study. The first group of families is now training at a pilot center on part of an Air Force base near Glasgow, Montana. By the fall some 200 families should be in residence. The program is operated under a $4 million grant from the Office of Education by the Mountain-Plains Education and Economic Development Program, Inc. The center serves residents of Idaho, Montana, Nebraska, North Dakota, South Dakota, and Wyoming.

In addition to research and development support for the four Career Education models, the Office of Education held 16 regional workshops this Spring to bring industry, labor, civic, and ethnic representation into the growing dialogue about Career Education. More than 1,200 spokesmen for some 30 national organizations met with Federal, State and local school educational leaders to map strategies for similar workshops in their States and communities.

The Office of Education also sponsored conferences of teacher educators to develop in-service and pre-service training programs for teachers. For example, education deans of 75 major American colleges and universities were convened to explore ways of building Career Education into their undergraduate preparation of teachers. The deans in turn nominated senior professionals from their schools of education to attend subsequent workshops.

The Office of Education also supports curriculum development in the 15 occupational clusters. We have developed and tested in 25 schools over a 3-year period junior high curriculums for the construction and manufacturing clusters. We have invested $2 million in this development effort.

Commissioner of Education, S. P. Marland, Jr., has made Career Education a top priority of the U.S. Office of Education, utilizing $114 million in Fiscal Year 1972 to support the initiatives. He has asked Congress for nearly $55 million more for Fiscal Year 1973.

President Nixon supports Career Education as a White House priority, giving it special emphasis in his 1972 State of the Union Message to Congress. He said: "Career Education is another area of major emphasis, an emphasis which grows out of my belief that our schools should be doing more to build self-reliance and self-sufficiency, to prepare students for a productive and fulfilling life. Too often, this has not been happening. Too many of our students, from all income groups, have been 'turning off' or 'turning out' on their educational experiences. And - whether they drop out of school or proceed on to college - too many young people find themselves unmotivated and ill-equipped for a rewarding social role. Many other Americans, who have already entered the world of work, find that they are dissatisfied with their jobs but feel that it is too late to change directions, that they already are 'locked in.'"

"One reason for this situation is the inflexibility of our educational system, including the fact that it so rigidly separates academic and vocational curricula. Too often vocational education is foolishly stigmatized as being less desirable than academic preparation. And too often the academic curriculum offers very little preparation for viable careers. Most students are unable to combine the most valuable features of both vocational and academic education; once they have chosen one curriculum, it is difficult to move to the other."

"The present approach serves the best interests of neither our students nor our society. The unhappy result is high numbers of able people who are unemployed, underemployed, or unhappily employed on the one hand - while many challenging jobs go begging on the other."

"We need a new approach, and I believe the best new approach is to strengthen Career Education."

"Career Education provides people of all ages with broader exposure to and better preparation for the world of work. It not only helps the young, but also provides adults with an opportunity to adapt their skills to changing needs, changing technology, and their own changing interests. It would not prematurely force an individual into a specific area of work but would expand his ability to choose wisely from a wider range of options. Neither would it result in slighting of academic preparation, which would remain a central part of the educational blend."

"Career Education is not a single specific program. It is more usefully thought of as a goal - and one that we can pursue through the many methods. What we need today is a nationwide search for such methods - a search which involves every area of education and every level of government. To help spark this venture, I will propose an intensified Federal effort to develop model programs which apply and test the best ideas in this field."

"There is no more disconcerting waste than the waste of human potential. And there is no better investment than an investment in human fulfillment. Career Education can help make education and training more meaningful for the student, more rewarding for the teachers, more available to the adult, more relevant for the disadvantaged, and more productive for our country."

Career Education is certainly not a new concept for the members of the Industrial Arts profession, since the history of this discipline has been one of preparing individuals to understand themselves, (their abilities and their talents) while preparing to develop the competencies necessary to make it possible for them to more wisely choose and pursue careers, in an expanding technological society.

Career Education and Industrial Arts share many similar goals. Some of the compatible goals include:

1. Preparation for successful working careers as an objective of all education.
2. Every teacher in every course that has career relevance will emphasize the contribution that subject matter can make to a successful career.
3. "Hands-on" occupationally oriented experiences will be utilized as a method of teaching and motivating the learning of abstract academic content.
4. Preparation for careers will encompass the mutual importance of work attitudes, human relation skills, orientation to the nature of the work day world, exposure to alternative career choices, and the acquisition of actual job skills.

5. Learning will not be reserved for the classroom but learning environments for career education will also be identified in the home, the community, and employing establishments.
6. Beginning in early childhood and continuing through the regular school years, allowing the flexibility for a youth to leave for experience and return to school for further education, including opportunity for upgrading and continued refurbishing for adult workers and including productive use of leisure time and the retirement years, career education will seek to extend its time horizons without beginning and without end.
7. Career education is a basic and pervasive approach to all education, but it in no way conflicts with other legitimate education objectives such as citizenship, culture, family responsibility, and basic education.

From these concepts it should be apparent that career education is not to be conceived as a time segment of education such as elementary, secondary, or post secondary education or as a separate subject matter such as industrial arts, vocational education or academic education. Yet it encompasses all of these and more. It is a basic part of all education.

Now that we have had a look at the broad aspects of career education I would like to focus your attention on recent legislation and the National leadership relative to support for industrial arts. As you perhaps already know the Vocational Education Act of 1963, P.L. 88-210 as amended by the Vocational Education Amendments of 1968, P.L. 90-576 provided new

challenges to Vocational Educators as well as the motivating force for greater cooperation with industrial arts educators. The new Act made vocational education available to more people, provided for better adjustment to the expanding demands of modern technology, encouraged innovative methods, experimentation and research, and stressed post secondary education for the handicapped and disadvantaged. The Vocational Education Amendments broadened the meaning of vocational education since it did not limit vocational education to any one subject matter area. From the standpoint of the Congress, vocational education had been broadened to include the following: (1) related academic and technical instruction incident to occupational education, (2) instruction necessary for students to benefit from (occupational) training, (3) vocational or technical training or retraining which is given -- to prepare individuals for enrollment in advanced technical education programs, and (4) vocational guidance and counseling which facilitates occupational choices.

This enlarged meaning of vocational education has provided the basis for greater cooperation and coordination with industrial arts educators. For many years such cooperation and coordination has been encouraged by many leaders in both fields. The reason why the partnership between industrial arts and vocational education is so important and suggestions of how it could be strengthened was the subject of a California study completed by Lathorp and Farr in 1968 -- the same year the vocational amendments became a law. This Study of the Relationships of Industrial Arts Education to Vocational Trade-Technical Education in California,

found there was, "general agreement by teachers, supervisors and consultants that a good industrial occupations program should be preceded by a good industrial arts program."

Among other things it suggested that to orient students to the actual world of work, the industrial arts program must not be too narrow in scope. The California study mentions that the States' present industrial arts program has this fault and that there is too much concentration on the traditional areas of drafting, wood and metal work. The California study also recommends, greater emphasis on course work in career guidance and occupational information for industrial arts teacher candidates at the college level."

So with this new call for cooperation stimulated by the passing of the Vocational Education Amendments of 1968, new support came for industrial arts on a small scale, but none-the-less is beginning to have significant impact for good in many programs in every State.

I am referring primarily to Federal discretionary funds Part C of the Act for Research and Training in Vocational Education and Part D, Exemplary Programs and Projects. Under Part C - Research, three Nationally recognized industrial arts curriculum projects have recently been completed.

1. The World of Construction
2. The World of Manufacturing
3. The American Industries Curriculum

The first two are already in operation and the third is in the final stages of negotiations for release to schools for operation in the near future.

In a Policy Paper issued by my office on August 29, 1972, the Bureau of Adult, Vocational and Technical Education announced the guidelines for Research and Development Programs in Vocational Education for FY 1973, to be supported under Section 131 (a) of Part C of the Act, P.L. 90-576. These guidelines again included, among other things, (1) programs designed to increase the self awareness of each student to develop in each student favorable attitudes about the personal, social, and economic significance of work, and to assist each student in developing and practicing appropriate career decision-making skills, (2) programs at the elementary school level designed to increase the career awareness of students in terms of the broad range of options open to them in the world of work, (3) programs at the junior high or middle school level designed to provide career orientation and meaningful exploratory experiences for student, and (4) programs at grade levels 10 through 14, and for adult education programs, designed to provide job preparation in a wide variety of occupational areas, with special emphasis on the utilization of work experience and cooperative education opportunities for all students.

I see industrial arts programs intensively involved in these research projects in each State since these guidelines not only fit the objectives of industrial arts, but since each project should be comprehensive in nature (that is it should cut across all educational experiences of a student at a given grade level) or the project should be an integral part of such a comprehensive program.

Many of you are also aware of the many Research projects that have implications for industrial arts which are presently underway in each State that have been funded from the State's half of Part C Federal funds.

I perhaps need to point out that vocational funds are used to support the Educational Resources Information Center (ERIC) which disseminates information about all of the Research and Exemplary Projects completed in the States or under National contract, for your review and possible use in industrial arts programs.

Soon after my appointment as Associate Commissioner of the Bureau of Adult, Vocational and Technical Education, we established an Ad Hoc Committee on Criteria and Guidelines for funding industrial arts under the Vocational Education Acts.

This Ad Hoc Committee, made up of distinguished industrial arts educators from National, State and University levels and from all section of the country, first met in Washington on October 26-27, 1971. U.S.

Commissioner Sidney Marland met with the Committee to express his great concern for the immediate development of career education, and promoted industrial arts as an educational discipline which should be involved immediately. The Commissioner's commitment constituted the charge to the Committee to prepare appropriate criteria and guidelines.

As a result of the work of this Committee, on November 4, 1972, Draft Criteria and Guidelines for funding industrial arts under the Vocational Education Act of 1963, as amended were issued. They were issued to serve as a guide for State Advisory Council members in carrying out their responsibilities under the Act and for State Boards for Vocational Education and State Vocational Education Administrators in developing and fostering vocational and recreational interests through industrial arts as an educational discipline. These guidelines were widely disseminated including immediate publication in the January 1972 issue of the "School Shop" magazine. As a result, the response was tremendouse - approval came via many telephone calls and more than 250 letters.

Not until the President signed the Education Amendments of 1972, P.L. 92-318 on June 23, 1972, has industrial arts been specifically included in Federal vocational education legislation. This new Act amends the Higher Education Act of 1965, the Vocational Education Act of 1963, the General Education Provisions Act (creating a National Foundation for Post-Secondary Education and a National Institute of Education), the Elementary and Secondary Education Act of 1965 and other

related Acts.

Title II, Section 202 (a) of the Educational Amendments of 1972 (the new Act) amends Section 108 (1) of the Vocational Education Act of 1963 by adding the following sentence to the definition of Vocational Education: "Such term includes industrial arts education programs in cases where the Commissioner determines by regulation that such programs will accomplish or facilitate one or more of the purposes of the first sentence of this paragraph."

Since this provision of the Act included industrial arts in the definition of Vocational Education, I invited the members of the Ad Hoc Committee again to Washington on July 19, 1972 to review among other matters the implications of the new legislation relative to (1) developing a definition of industrial arts - applicable to provisions of the legislation; (2) identifying eligibility requirements for industrial arts programs to qualify under Federal regulations as well as (3) identify curriculum needs for eligible industrial arts programs which I will discuss later.

After some polishing by the Office of Education legal staff, the draft of the regulations were disseminated in September to the members of the Ad Hoc Committee to the State Directors of Vocational Education for their discussion with State staff. So far the general reactions from members of the Ad Hoc Committee and the State Directors of Vocational Education has been very positive.

Soon we will start the draft of the regulations pertaining to industrial arts through the clearance process. As you may know this process of clearance takes a number of steps which are required by the provisions of the Federal Inter-Governmental Relations Act.

For example, the present draft of the regulations will be reviewed for 45 days before publication in the Federal Register. After wide dissemination in the Register for a 30-day period, it then returns to the Federal level for a second 30-day wait period, during which time adjustments are made as appropriate before the Commissioner of Education and the Secretary of Health, Education, and Welfare sign the final document.

States may modify their State plans to include industrial arts as soon as the official copy of the regulations appear in the Federal Register.

Because of this process the present regulations will be too late for Federal funding during Fiscal Year 1973; however, there is ample time, it seems to me, for adequate planning between now and June 30, 1973. It would be my recommendation that since Fiscal Year 1973 programs are well underway it would be wise to plan now and have programs properly included in the State Plan for Vocational Education for Fiscal Year 1974.

We have recently made a grant to the University of Pittsburgh for "The Development of Guidelines for Industrial Arts in Career Education - Implications for Curriculum Development." It is the purpose of this

project to assist industrial arts personnel to plan, modify and develop curriculum to support vocational, technical, and career education.

The co-directors of this curriculum project are Dr. Rutherford Lockette, College of Education, University of Pittsburgh, and Dr. Frederick Kagy, Department of Industrial Technology, Illinois State University at Normal. To provide continuous support, there is a Task Force of six representatives at the Industrial Arts Division of the American Vocational Association and six representatives of the American Industrial Arts Association. This Curriculum Development Task Force is made up of the same membership as the Ad Hoc Committee which developed Criteria and Guidelines for funding industrial arts under the Vocational Education Act, which was reported to the U.S. Office of Education early in 1972. It was this Task Force that met in Washington, D.C. on July 18-19, 1972 to make recommendations to the U.S. Office of Education on regulations relating to industrial arts education under the provisions of the Educational Amendments of 1972.

The Task Force recently held a meeting (September 27-October 1, 1972) and a report indicates much progress is being made toward three anticipated results:

1. Identification of guidelines for the evaluation and for development of industrial arts curriculum designed to implement the career education thrust.
2. Evolvement of an operational understanding of the interrelationships between industrial arts and other organized bodies of knowledge.

3. Enhancement of the espirit de corps among professionals and professional organizations which are directly or indirectly involved with industrial arts.

On October 25-28 in St. Louis a National Conference was convened with representatives from all of the States to discuss the role of industrial arts in career education. This conference was funded under the Education Professions Act in cooperation with the American Vocational Association and with the support of the American Industrial Arts Association.

The Conference had sought to contribute to the following goals:

- Focus on industrial arts as an integral aspect of career education.
- Consider strategies and techniques to implement industrial arts role as a vital segment of vocational education.
- Explore guidelines for teacher education in the preparation of industrial arts personnel.
- Initiates the process of developing and disseminating material that may be used in the formulation of guidelines for the implementation of the role of industrial arts in career education.

Industrial arts may also benefit under the Educational Amendments of 1972, particularly under Title X, Part B - Occupational Education Programs. Among other things, under this part, States will be encouraged to develop a long-range strategy for infusing occupational education

(including general orientation, counseling and guidance, and placement either in a job in post secondary occupational programs) into elementary and secondary schools on an equal footing with traditional academic education, to the end that every child who leaves secondary school is prepared either to enter productive employment or to undertake additional education at the post secondary level, but without being forced prematurely to make an irrevocable commitment to a particular educational or occupational choice.

This new legislation provides for the establishment of State Commissions responsible for long-range planning. All programs which are to share in the Federal funding provided for under the several provisions of the Act must have such programs approved by the State Commission as a a part of the State Plan which is later approved by the U.S. Commissioner of Education.

In order for industrial arts programs to benefit from present legislation, they must become a part of the total system, be included in the State Plans, and be approved by the Commissioner of Education.

Members of the U.S. Council of Chief State School Officers representing each of the Staes and Territories have pledged a mjaor effort to gain legislative and public endorsement in their individual States. Several State legislatures have already approved substantial sums to design and implement Career Education programs in-school districts.

Large city school systems turning to Career Education as their basic design include those of Dallas, Texas and San Diego, California.

Many professional educational associations have devoted conferences and field investigation to a better articulation of the concept, problems, and potential of Career Education.

Career Education is clearly then an idea whose time has come and its implication for the future of post secondary and adult education in the United States are many and obvious. It is essential that this concept encompass the entire educational system and all its participants because there can be no adult education program developed which is completely separate from education for young children, adolescents, and college age students. The provision of any new system for education which is geared to the needs of individuals who have completed their typical formal education must constitute the development of a basic factor which redesigns and re-determines the fundamental form of the entire educational system from pre-school through college.

Until we bring career awareness down into the elementary grades -- until we give youngsters the desire and motivation to aim for a career that excites them -- until we prepare them to leave high school with a marketable skill or to complete work in a college or technical institute or Area Vocational-Technical School with a more advanced skill -- until we key all these activities to the labor market as it will exist when these students are ready to enter it -- until Career Education becomes an integral part of the educational system we will continue to shortchange both our students and our society.

The Career Education concept has acquired some impressive endorsements in recent months. President Nixon called for a new emphasis on Career Education in his State of the Union message Congress in January, saying that: "There is no more disconcerting investment than an investment in human fulfillment. Career Education can help make education and training more meaningful for the student, more rewarding for the teacher, more available to the adult, more relevant for the disadvantated and more productive for our country."

The National Association of State Directors of Vocational Education was one of the first groups to formally endorse the concept of Career Education and pledged their support. Vocational Education is an important part of Career Education! The National Advisory Council on Vocational Education passed a resolution this week commending the Administration for its efforts in Career Education.

And in the offical White House proclamation for Vocational Education Week, February 13-19, 1972, the President also stated that: "Owing much to the efforts of vocational educators, we are now on the threshold of a new concept of education which can make school both more interesting to the student and more relevant to him and his society. This concept, Career Education, is based on the principle that a complete and meaningful education should include the opportunity to learn about the world of work.

"The vocational educator can take satisfaction from the fact that the new concept of Career Education derives its heart and energy from the efforts so carefully begun by the vocational and technical teachers of America."

Many of us at the Office of Education have worked for several months in closest cooperation with the Chief State School Officers, university-based research centers, representative school districts, and professional education associations to try to develop a first approximation of what Career Education could, not necessarily should be.

The Chief State School Officers support the basic concept without reservation. They have pledged a major effort to gain legislative and public endorsement in their own States and to use the resources available to them to encourage the adoption of Career Education elements in their local school districts. State legislatures, notably Florida, Arizona, and New Jersey, are making the ultimate commitment -- putting money where their endorsement is.

There are certain basic elements to the Career Education concept that I would like to clarify here.

-- Career Education is not a high-sounding new name for what we have always called vocational education.

-- Career Education is for every child: rich, poor, suburban, urban, rural; beginning in his first school year and following him as far as he goes in the education system.

-- Career Education is a way to provide career awareness in the early grades and career preparation in the upper grades that continues at an ever-increasing level of sophistication until every student is equipped to enter the occupation of his choice -- limited only by his personal ability.

-- Career Education must include Vocational Education because we estimate at leat 80% of our school youth should develop salable skills while in school.

-- Career Education is not only for children and young adults, It is also for persons of all ages for anyone who wants to enhance his occupational and earning potential. Two of the four Research and Development models for Career Education developed by the Office of Education are pointed specifically toward adults.

-- Career Education favors no ethnic group to the exclusion of any other. It simply recognizes that concentration and motivation need to be ignited early in life -- rekindled later -- so that every individual can pursue the occupation and life style of his or her choice.

-- Career Education is not a rigid program from which no State or school district or adult training effort can deviate. Every State, every community, has a population, an occupation market and an educational system that differs in some degree from every other. Career Education is flexible and can be molded to the unique needs of every State and community.

-- Career Education is not a restructuring of education that will bankrupt our citizenry. True, startup costs in schools should be somewhat higher than present per-pupil costs. These costs would include the addition of many more guidance counselors and the retraining of those we have to bring career orientation down to the elementary grades and to pay for higher costs of the skill development training equipment needed for secondary and post-secondary level.

I should like to emphasize particularly the need for redirecting guidance and counseling, at all levels, as we develop this concept of Career Education because in order for an individual to choose a career he must first know how to make occupational decisions based upon the knowledge and understanding of occupational opportunities. "A full 12 years ago the famed educator, Dr. James B. Conant, recommended in "The American High School Today" that our high schools have one vocational counselor for every 250 to 300 students ...

We also urgently need in our high schools far more emphasis on group counseling to make the best possible use of the limited personnel, far more emphasis on counseling those not college-bound

and on educating girls and minority members to the full range of opportunities ahead of them if they have the right education-training.

We need to reassess as a society the function of education in preparing our youth both for productive careers and rewarding lives. Chances are, every generation produces only one Hemingway and one Lindbergh, one Edison and one Sarnoff, and they will probably make it despite the odds. If there is any single goal inherent in the Career Education Concept, it is to expand the minority who made it in our generation to encompass the great majority of young people in the next. That goal requires the dedicated involvement of us all.